10/551931

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=> d his

     (FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007
L1         13234 S BLOOD (A)SUBSTITUTE?
L2           224 S CONJUGATED (A)HEMOGLOBIN?
L3         59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4             5 S L2 AND L3
L5             4 DUP REM L4 (1 DUPLICATE REMOVED)
L6             2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
                 E SU Z/AU
L7           909 S E3
                 E XIULING L/AU
L8             7 S E3
                 E CHUNYANG Z/AU
                 E YUHONG X/AU
L9             3 S E3
L10          919 S L7 OR L8 OR L9
L11            0 S L2 AND L10

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 NEWS  1           Web Page for STN Seminar Schedule - N. America
 NEWS  2  MAR 15   WPIDS/WPIX enhanced with new FRAGHITSTR display format
 NEWS  3  MAR 16   CASREACT coverage extended
 NEWS  4  MAR 20   MARPAT now updated daily
 NEWS  5  MAR 22   LWPI reloaded
 NEWS  6  MAR 30   RDISCLOSURE reloaded with enhancements
 NEWS  7  APR 02   JICST-EPLUS removed from database clusters and STN
 NEWS  8  APR 30   GENBANK reloaded and enhanced with Genome Project ID field
 NEWS  9  APR 30   CHEMCATS enhanced with 1.2 million new records
 NEWS 10  APR 30   CA/CAplus enhanced with 1870-1889 U.S. patent records
 NEWS 11  APR 30   INPADOC replaced by INPADOCDB on STN
 NEWS 12  MAY 01   New CAS web site launched
 NEWS 13  MAY 08   CA/CAplus Indian patent publication number format defined
 NEWS 14  MAY 14   RDISCLOSURE on STN Easy enhanced with new search and display
                   fields
 NEWS 15  MAY 21   BIOSIS reloaded and enhanced with archival data
 NEWS 16  MAY 21   TOXCENTER enhanced with BIOSIS reload
 NEWS 17  MAY 21   CA/CAplus enhanced with additional kind codes for German
                   patents
 NEWS 18  MAY 22   CA/CAplus enhanced with IPC reclassification in Japanese
                   patents
 NEWS 19  JUN 27   CA/CAplus enhanced with pre-1967 CAS Registry Numbers
 NEWS 20  JUN 29   STN Viewer now available
 NEWS 21  JUN 29   STN Express, Version 8.2, now available
 NEWS 22  JUL 02   LEMBASE coverage updated
 NEWS 23  JUL 02   LMEDLINE coverage updated
 NEWS 24  JUL 02   SCISEARCH enhanced with complete author names
 NEWS 25  JUL 02   CHEMCATS accession numbers revised
 NEWS 26  JUL 02   CA/CAplus enhanced with utility model patents from China

 NEWS EXPRESS  29 JUNE 2007:  CURRENT WINDOWS VERSION IS V8.2,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
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=> file medline embase biosis biotechds scisearch hcaplus ntis lifesci
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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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FILE 'LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007
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=> s blood (a)substitute?
L1       13234 BLOOD (A) SUBSTITUTE?

=> s conjugated (a)hemoglobin?
L2         224 CONJUGATED (A) HEMOGLOBIN?

=> s hSA or (human (w)serum (w)albumin)
L3       59596 HSA OR (HUMAN (W) SERUM (W) ALBUMIN)

=> s l2 and l3
L4           5 L2 AND L3

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5           4 DUP REM L4 (1 DUPLICATE REMOVED)

=> d 1-4 ibib ab

L5   ANSWER 1 OF 4  EMBASE  COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:   2007127303  EMBASE
TITLE:              Engineering blood cells and proteins as blood substitutes:
                    A short review.
AUTHOR:             Kim H.W.
CORPORATE SOURCE:   H.W. Kim, Biopure Corp.,, 11 Hurley Street, Cambridge, MA
                    02141, United States. Hae_Kim@Brown.edu
SOURCE:             Biotechnology and Bioprocess Engineering, (2007) Vol. 12,
                    No. 1, pp. 43-47. .
```

Refs: 30
ISSN: 1226-8372
COUNTRY: Korea, Republic of
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 025 Hematology
027 Biophysics, Bioengineering and Medical Instrumentation
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 30 Mar 2007
Last Updated on STN: 30 Mar 2007

AB In this brief review, basic principles and recent progresses on the development of therapeutic substitutes for major blood components are briefly discussed with primary focus on the red cell substitute. .COPYRGT. KSBB.

L5 ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 2006:86173 BIOSIS
DOCUMENT NUMBER: PREV200600077521
TITLE: Extreme hemodilution with PEG-hemoglobin vs. PEG-albumin.
AUTHOR(S): Cabrales, Pedro [Reprint Author]; Tsai, Amy G.; Winslow, Robert M.; Intaglietta, Marcos
CORPORATE SOURCE: La Jolla Bioengn Inst, 505 Coast Blvd S,Suite 405, La Jolla, CA 92037 USA
pcabrales@ucsd.edu
SOURCE: American Journal of Physiology - Heart and Circulatory Physiology, (DEC 2005) Vol. 289, No. 6, pp. H2392-H2400.
ISSN: 0363-6135.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Jan 2006
Last Updated on STN: 25 Jan 2006

AB Isovolemic hemodilution to 11% systemic hematocrit was performed in the hamster window chamber model using 6% dextran 70 kDa (Dx 70) and 5% human serum albumin (HSA). Systemic and microvascular effects of these solutions were compared with polyethylene glycol (PEG)-conjugated 5% albumin (MPA) and PEG-conjugated 4.2% Hb (MP4). These studies were performed for the purpose of comparing systemic and microvascular responses of PEG vs. non-PEG plasma expanders and similar oxygen-carrying vs. noncarrying blood replacement fluids. Mean arterial blood pressure was statistically significantly reduced for all groups compared with baseline ($P < 0.05$), HSA, MPA, and MP4 higher than Dx 70 ($P < 0.05$). MP4 and MPA had a significantly higher cardiac index than HSA and Dx 70, in addition to a positive base excess. Microvascular blood flow and capillary perfusion were significantly higher for the PEG compounds compared with HSA and Dx 70. Intravascular PO2 for MP4 and MPA was higher in arterioles ($P < 0.05$) compared with HSA and Dx 70, but there was no difference in either tissue or venular PO2 between groups. Total Hb in the MP4 group was 4.8 +/- 0.4 g/dl, whereas the remaining groups had a range of 3.6-3.8 g/dl. The hemodilution results showed that PEG compounds maintained microvascular conditions with lower concentrations than conventional plasma expanders. Furthermore, microvascular oxygen delivery and extraction in the window chamber tissue were significantly higher for the PEG compounds. MP4 was significantly higher than MPA ($P < 0.05$) and was not statistically different from baseline, an effect due to the additional oxygen release to the tissue by the Hb MP4.

L5 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:571260 HCAPLUS
DOCUMENT NUMBER: 143:90623
TITLE: Conjugate of bovine hemoglobin and human

serum albumin as a candidate for blood substitute: Characteristics and effects on rats

AUTHOR(S): Lu, Xiu-Ling; Zheng, Chun-Yang; Shi, Xiao-Dong; Wang, Yong-Quan; Suo, Xiao-Yan; Yu, Peng-Zhan; Xu, Yu-Hong; Ma, Tie-Min; Su, Zhi-Guo

CORPORATE SOURCE: National Key Laboratory of Biochemical Engineering, Institute of Process Engineering, Chinese Academy of Sciences, Beijing, Peop. Rep. China

SOURCE: Artificial Cells, Blood Substitutes, and Biotechnology (2005), 33(2), 83-99
CODEN: ACBSDA

PUBLISHER: Taylor & Francis, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Conjugate of bovine Hb (bHb) and human serum albumin (HSA) was prepared The product was simply composed of 89.7% one-to-one Hb-HSA conjugate, 6.0% oligomer of Hb and HSA, 3.5% unconjugated HSA and 0.8% unconjugated Hb, with an average mol. weight of 157 kD. The physicochem. characteristics were determined Effects of single replacement on blood pressure and long-term survival of rats with 30% and 60% acute blood loss were studied, in comparison with Ringer-lactate solution, stroma-free Hb (SFHb), 5% HSA in Ringer-lactate, whole blood and no resuscitation fluid. Results showed that Hb-HSA conjugate maintained the mean arterial pressure of rats to initial level with no pressor effect. Long-term effects of the replacement fluids on 30% bleeding rats showed that, for the group infused with Hb-HSA conjugate, histol. of five major organs, heart, kidney, liver, spleen and lung, were essentially normal, similar to that of whole blood, while obviously. Renal side-effects appeared in other groups. The efficacy of the conjugate was further demonstrated by the resuscitation of lethal hemorrhagic shock rats (60% acute blood loss) with 100% survival rate (followed for 14 days), the same result as whole blood. The Hb-HSA conjugate can thus be another candidate for blood substitute in emergency.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
DUPLICATE 1

ACCESSION NUMBER: 2000:119605 BIOSIS

DOCUMENT NUMBER: PREV200000119605

TITLE: Synthesis and physicochemical characterization of a series of hemoglobin-based oxygen carriers: Objective comparison between cellular and acellular types.

AUTHOR(S): Sakai, Hiromi; Yuasa, Minako; Onuma, Hiroto; Takeoka, Shinji; Tsuchida, Eishun [Reprint author]

CORPORATE SOURCE: Department of Polymer Chemistry, Advanced Research Institute for Science and Engineering, Waseda University, Tokyo, 169-8555, Japan

SOURCE: Bioconjugate Chemistry, (Jan.-Feb., 2000) Vol. 11, No. 1, pp. 56-64. print.
CODEN: BCCHES. ISSN: 1043-1802.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Mar 2000
Last Updated on STN: 3 Jan 2002

AB A series of hemoglobin (Hb)-based O2 carriers, acellular and cellular types, were synthesized and their physicochemical characteristics were compared. The acellular type includes intramolecularly cross-linked Hb (XLHb), polyoxyethylene (POE)-conjugated pyridoxalated Hb (POE-PLP-Hb), hydroxyethylstarch-conjugated Hb (HES-XLHb), and glutaraldehyde-polymerized XLHb (Poly-XLHb). The cellular type is Hb-vesicles (HbV) of which the surface is modified with POE (POE-HbV). Their particle

diameters are 7 +- 2, 22 +- 2, 47 +- 17, 68 +- 24, and 224 +- 76 nm, respectively, thus all the materials penetrate across membrane filters with 0.4 mum pore size, though only the POE-HbV cannot penetrate across the filter with 0.2 mum pore size. These characteristics of permeability are important to consider an optimal particle size in microcirculation in vivo. POE-PLP-Hb ((Hb) = 5 g/dL) showed viscosity of 6.1 cP at 332 s-1 and colloid osmotic pressure (COP) of 70.2 Torr, which are beyond the physiological conditions (human blood, viscosity = 3-4 cP, COP = ca. 25 Torr). XLHb and Poly-XLHb showed viscosities of 1.0 and 1.5 cp, respectively, which are significantly lower than that of blood. COP of POE-HbV is regulated to 20 Torr in 5% human serum albumin (HSA). HES-XLHb and POE-HbV/HSA showed comparable viscosity with human blood. Microscopic observation of human red blood cells (RBC) after mixing blood with POE-PLP-Hb or HES-XLHb disclosed aggregates of RBC, a kind of sludge, indicating a strong interaction with RBC, which is anticipated to modify peripheral blood flow in vivo. On the other hand, XLHb and POE-HbV showed no rouleaux or aggregates of RBC. The acellular Hbs (P50 = 14-32 Torr) have their specific O2 affinities determined by their structures, while that of the cellular POE-HbV is regulated by coencapsulating an appropriate amount of an allosteric effector (e.g., P50 = 18, 32 Torr). These differences in physicochemical characteristics between the acellular and cellular types indicate the advantages of the cellular type from the physiological points of view.

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     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007
L1         13234 S BLOOD (A)SUBSTITUTE?
L2           224 S CONJUGATED (A)HEMOGLOBIN?
L3         59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4             5 S L2 AND L3
L5             4 DUP REM L4 (1 DUPLICATE REMOVED)

=> s albumin (w)hemoglobin (w)conjugat?
L6             2 ALBUMIN (W) HEMOGLOBIN (W) CONJUGAT?

=> d 1-2 ibib ab

L6   ANSWER 1 OF 2  EMBASE  COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:    2002420677  EMBASE
TITLE:               A solid phase adsorption method for preparation of bovine
                     serum albumin-bovine hemoglobin conjugate.
AUTHOR:              Hu T.; Su Z.
CORPORATE SOURCE:    Z. Su, National Lab. Biochemical Eng., Institute of Process
                     Engineering, Chinese Academy of Sciences, P.O. Box 353,
                     Beijing 100080, China. zgsu@home.ipe.ac.cn
SOURCE:              Journal of Biotechnology, (13 Feb 2003) Vol. 100, No. 3,
                     pp. 267-275. .
                     Refs: 17
                     ISSN: 0168-1656  CODEN: JBITD4
PUBLISHER IDENT.:    S 0168-1656(02)00246-8
COUNTRY:             Netherlands
DOCUMENT TYPE:       Journal; Article
FILE SEGMENT:        004     Microbiology
                     027     Biophysics, Bioengineering and Medical
                             Instrumentation
LANGUAGE:            English
SUMMARY LANGUAGE:    English
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ENTRY DATE: Entered STN: 12 Dec 2002
Last Updated on STN: 12 Dec 2002

AB A solid phase adsorption method was proposed to prepare well-defined bovine serum albumin-bovine hemoglobin (Hb) conjugate. After adsorption by the solid phase, Q Sepharose Fast Flow media, bovine serum albumin (BSA) molecules were allowed to react with glutaraldehyde. The spacing out of BSA molecules on the solid phase was assumed to limit polymerization of BSA molecules, except some molecules bound closely on the solid phase resulting in minor dimer formation. Following the elution procedure, the activated monomeric BSA was separated from the dimers by gel filtration chromatography on Superdex 200 and then reacted with bovine Hb at 4°C and pH 9.5. The 1:1 (BSA:Hb) conjugate was obtained with the yield of 64%. The P(50) values of the conjugates, prepared under anaerobic and aerobic conditions, were 19.1 and 14.2 mmHg, respectively. The dependence of the P(50) on chloride ions for the conjugate was slightly diminished, presumably due to covalent attachment of BSA to bovine Hb.

L6 ANSWER 2 OF 2 HCAPLUS
ACCESSION NUMBER: 2002:872226 HCAPLUS
DOCUMENT NUMBER: 138:270350
TITLE: A solid phase adsorption method for preparation of bovine serum albumin-bovine hemoglobin conjugate
AUTHOR(S): Hu, Tao; Su, Zhiguo
CORPORATE SOURCE: Institute of Process Engineering, National Laboratory of Biochemical Engineering, Chinese Academy of Sciences, Beijing, 100080, Peop. Rep. China
SOURCE: Journal of Biotechnology (2003), 100(3), 267-275
CODEN: JBITD4; ISSN: 0168-1656
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A solid phase adsorption method was proposed to prepare well-defined bovine serum albumin-bovine Hb conjugate. After adsorption by the solid phase, Q Sepharose Fast Flow media, bovine serum albumin (BSA) mols. were allowed to react with glutaraldehyde. The spacing out of BSA mols. on the solid phase was assumed to limit polymerization of BSA mols., except some mols. bound closely on the solid phase resulting in minor dimer formation. Following the elution procedure, the activated monomeric BSA was separated from the dimers by gel filtration chromatog. on Superdex 200 and then reacted with bovine Hb at 4 °C and pH 9.5. The 1:1 (BSA:Hb) conjugate was obtained with the yield of 64%. The P50 values of the conjugates, prepared under anaerobic and aerobic conditions, were 19.1 and 14.2 mmHg, resp. The dependence of the P50 on chloride ions for the conjugate was slightly diminished, presumably due to covalent attachment of BSA to bovine Hb.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007

L1 13234 S BLOOD (A)SUBSTITUTE?
L2 224 S CONJUGATED (A)HEMOGLOBIN?
L3 59596 S HSA OR (HUMAN (W)SERUM (W)ALBUMIN)
L4 5 S L2 AND L3
L5 4 DUP REM L4 (1 DUPLICATE REMOVED)
L6 2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?

=> e su z/au
E1 1 SU YVONNE C E/AU

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E2            7      SU YVONNE C F/AU
E3          909 --> SU Z/AU
E4           11      SU Z A/AU
E5          278      SU Z B/AU
E6           28      SU Z C/AU
E7           85      SU Z D/AU
E8           49      SU Z F/AU
E9          194      SU Z G/AU
E10         117      SU Z H/AU
E11           1      SU Z I FEN/AU
E12          49      SU Z J/AU

=> s e3
L7          909 "SU Z"/AU

=> e Xiuling l/au
E1            1      XIULING H/AU
E2            1      XIULING JIN/AU
E3            7 --> XIULING L/AU
E4            1      XIULING LI/AU
E5            1      XIULING LIN/AU
E6            1      XIULING W/AU
E7            3      XIULING WANG/AU
E8            2      XIULING X/AU
E9            2      XIULING XU/AU
E10           1      XIULING XUE/AU
E11           1      XIULING Z/AU
E12           1      XIULONG/AU

=> s e3
L8            7 "XIULING L"/AU

=> e chunyang z/au
E1            2      CHUNYANG LIU/AU
E2            1      CHUNYANG LU/AU
E3            0 --> CHUNYANG Z/AU
E4            1      CHUNYAO T/AU
E5            1      CHUNYAO WU/AU
E6            1      CHUNYAYEV OLEG NIKOLAYEVICH/AU
E7            1      CHUNYAYEVA LIDIYA OMOVNA/AU
E8            1      CHUNYEN P/AU
E9            1      CHUNYI GAO/AU
E10           1      CHUNYI MA/AU
E11           1      CHUNYI N/AU
E12           3      CHUNYI W/AU

=> e yuhong x/au
E1            1      YUHONG WANG/AU
E2            1      YUHONG WU/AU
E3            3 --> YUHONG X/AU
E4            1      YUHONG Y/AU
E5            1      YUHONG Z/AU
E6            1      YUHONG ZHANG/AU
E7            1      YUHONG ZHAO/AU
E8            1      YUHOS CSABA/AU
E9            1      YUHOS R/AU
E10           1      YUHOSZ M D/AU
E11           1      YUHOU CHEN/AU
E12           1      YUHOU FAN/AU

=> s e3
L9            3 "YUHONG X"/AU

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      FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
      LIFESCI' ENTERED AT 14:42:13 ON 13 JUL 2007
L1         13234 S BLOOD (A)SUBSTITUTE?
L2           224 S CONJUGATED (A)HEMOGLOBIN?
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L4             5 S L2 AND L3
L5             4 DUP REM L4 (1 DUPLICATE REMOVED)
L6             2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
                 E SU Z/AU
L7           909 S E3
                 E XIULING L/AU
L8             7 S E3
                 E CHUNYANG Z/AU
                 E YUHONG X/AU
L9             3 S E3

=> s l7 or l8 or l9
L10          919 L7 OR L8 OR L9

=> s l2 and l10
L11            0 L2 AND L10

=> d his

      (FILE 'HOME' ENTERED AT 14:41:29 ON 13 JUL 2007)

      FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
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L4             5 S L2 AND L3
L5             4 DUP REM L4 (1 DUPLICATE REMOVED)
L6             2 S ALBUMIN (W)HEMOGLOBIN (W)CONJUGAT?
                 E SU Z/AU
L7           909 S E3
                 E XIULING L/AU
L8             7 S E3
                 E CHUNYANG Z/AU
                 E YUHONG X/AU
L9             3 S E3
L10          919 S L7 OR L8 OR L9
L11            0 S L2 AND L10
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	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 20060247423 A1		US-PGPUB	20061102	11	Hemoglobin conjugate and the preparation method and its use

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 20040259769 A1		US-PGPUB	20041223	57	Reduced side-effect hemoglobin compositions
2	US 20030219406 A1		US-PGPUB	20031127	44	Beta-2-glycoprotein is an inhibitor of angiogenesis
3	US 7211560 B2		USPAT	20070501	55	Reduced side-effect hemoglobin compositions
4	US 6670323 B1		USPAT	20031230	65	Reduced side-effect hemoglobin compositions
5	US 6458762 B1		USPAT	20021001	15	Therapeutic use of hemoglobin for preserving tissue viability and reducing restenosis
6	US 6117838 A		USPAT	20000912	12	Use of hemoglobin in the treatment of hypotension
7	US 6090779 A		USPAT	20000718	10	Use of hemoglobin to treat septic shock
8	US 6046161 A		USPAT	20000404	10	Use of hemoglobin in the treatment of cardiogenic shock
9	US 6022850 A		USPAT	20000208	10	Use of hemoglobin in the treatment of stroke
10	US 5945033 A		USPAT	19990831	65	Method for making non-crosslinked protein particles for therapeutic and diagnostic use
11	US 5900477 A		USPAT	19990504	10	Use of hemoglobin in the treatment of hemorrhagic shock
12	US 5877146 A		USPAT	19990302	10	Therapeutic use of hemoglobin in the treatment of blood vessel blockage

13	US 5773417 A		USPAT	19980630	19	Human serum albumin-porphyrin complexes with the ability to bind oxygen and therapeutic uses thereof

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
14	US 5733546 A		USPAT	19980331	28	Immunochemical detection of in vivo advanced glycosylation endproducts
15	US 5712101 A		USPAT	19980127	27	Immunochemical detection of in vivo advanced glycosylation endproducts
16	US 5702704 A		USPAT	19971230	28	Antibodies to in vivo advanced glycosylation endproducts
17	US 5683887 A		USPAT	19971104	28	Immunochemical detection of in vivo advanced glycosylation endproducts
18	US 5629408 A		USPAT	19970513	28	Immunochemical isolation of in vivo advanced glycosylation endproducts
19	US 5624804 A		USPAT	19970429	29	Immunochemical detection of In vivo advanced glycosylation end products
20	US 5616311 A		USPAT	19970401	25	Non-crosslinked protein particles for therapeutic and diagnostic use
21	US 5614490 A		USPAT	19970325	11	Administration of low dose hemoglobin to increase perfusion
22	US 5512268 A		USPAT	19960430	21	Polymeric shells for medical imaging prepared from synthetic polymers, and methods for the use thereof
23	US 5510464 A		USPAT	19960423	11	Administration of low dose hemoglobin to increase perfusion

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
24	US 5508021 A		USPAT	19960416	20	Non-fluorinated polymeric shells for medical imaging
25	US 5505932 A		USPAT	19960409	21	Method for the preparation of fluorocarbon-containing polymeric shells for medical imaging
26	US 5334706 A		USPAT	19940802	11	Administration of low dose hemoglobin to increase perfusion

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 20060247423 A1		US-PGPUB	20061102	11	Hemoglobin conjugate and the preparation method and its use
2	US 20050048627 A1		US-PGPUB	20050303	21	Human serum albumin-TIMP2 fusion protein, a polynucleotide encoding the same and a method of producing the human serum albumin-TIMP2 fusion protein
3	US 20030219406 A1		US-PGPUB	20031127	44	Beta-2-glycoprotein is an inhibitor of angiogenesis
4	US 7163805 B2		USPAT	20070116	20	Human serum albumin-TIMP2 fusion protein, a polynucleotide encoding the same and a method of producing the human serum albumin-TIMP2 fusion protein
5	US 5945033 A		USPAT	19990831	65	Method for making non-crosslinked protein particles for therapeutic and diagnostic use
6	US 5919708 A		USPAT	19990706	14	Assay for glycated blood proteins
7	US 5733546 A		USPAT	19980331	28	Immunochemical detection of in vivo advanced glycosylation endproducts
8	US 5712101 A		USPAT	19980127	27	Immunochemical detection of in vivo advanced glycosylation endproducts
9	US 5702704 A		USPAT	19971230	28	Antibodies to in vivo advanced glycosylation endproducts

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10	US 5683887 A		USPAT	19971104	28	Immunochemical detection of in vivo advanced glycosylation endproducts
11	US 5629408 A		USPAT	19970513	28	Immunochemical isolation of in vivo advanced glycosylation endproducts
12	US 5624804 A		USPAT	19970429	29	Immunochemical detection of In vivo advanced glycosylation end products
13	US 5616311 A		USPAT	19970401	25	Non-crosslinked protein particles for therapeutic and diagnostic use
14	US 5512268 A		USPAT	19960430	21	Polymeric shells for medical imaging prepared from synthetic polymers, and methods for the use thereof
15	US 5508021 A		USPAT	19960416	20	Non-fluorinated polymeric shells for medical imaging
16	US 5506144 A		USPAT	19960409	14	Assay for glycated blood proteins
17	US 5505932 A		USPAT	19960409	21	Method for the preparation of fluorocarbon-containing polymeric shells for medical imaging

	L #	Hits	Search Text
1	L1	35	hemoglobin adj5 HSA
2	L2	191106	conjugate$2
3	L4	352959	blood
4	L5	17	l3 and l4
5	L3	17	l1 and l2
6	L6	174883	crosslink$3
7	L7	26	l1 and l6
8	L8	1	hb-hsa
9	L9	125294	SU XIULING CHUNYANG YUHONG
10	L10	1	l1 and l9